Application No.:

10/519,339

Filing Date:

August 15, 2005

## AMENDMENTS TO THE CLAIMS

Please amend the claims as follows. Insertions are shown <u>underlined</u> while deletions are struck through.

1 (currently amended): A conductive resin film constituted by laminated layers comprising:

a conductive substrate layer; and

a low-resistance layer with a volume resistance of 0.1 to 1.0  $\Omega$ cm in a thickness direction as at least one of its outermost layer;

each layer of the laminated layers being made of a thermoplastic resin and a conductive agent,

wherein the substrate layer comprises a conductive agent selected from the group consisting of graphite powder, exfoliated graphite, carbon black, carbon fiber, carbon nanofiber, carbon nanotube, a metal carbide, a metal nitride, a metal oxide, metal fiber and metal powder;

wherein the conductive substrate layer and the low-resistance layer comprise a thermoplastic resin selected from the group consisting of polyolefin resins, polyolefin elastomers, amorphous polyolefin resins, polystyrene resins, hydrogenated styrene elastomers, polyvinyl chloride resins, polyvinylidene chloride resins, (meth)acrylate, (meth)acrylic resins, polyetherimide resins, polysulphone resins, polyethersulphone resin, polyamide imide resins, polyalylate resins, fluororesins and fluoro-elastomers; and

wherein a volume resistance of the low-resistance layer in a thickness direction is 1/5 or less of a volume resistance of the substrate layer in a thickness direction, and a volume resistance of the conductive resin film as a whole in a thickness direction is 0.01 to  $5 \Omega cm$ .

2 (canceled):

3 (previously presented): The conductive resin film as claimed in Claim 1, wherein the low-resistance layer is a layer in which the thermoplastic resin comprises a fine carbon fiber with a fiber diameter of 0.003 to 0.5 µm and a fiber length of 0.1 to 100 µm as a conductive agent.

4 (previously presented): The conductive resin film as claimed in Claim 1, wherein a thickness of the low-resistance layer is 1 to 50  $\mu m$ 

Application No.: 10/519,339 Filing Date: August 15, 2005

5 (canceled)

6 (previously presented): A process for manufacturing a conductive resin film as claimed in Claim 1, comprising the steps of applying a liquid composition of a fine carbon fiber and a thermoplastic resin in a solvent to a flat surface of a support, followed by drying or curing to form a coating film; placing the coating film over at least one side of a conductive substrate layer made of a thermoplastic resin and a conductive agent; and performing a lamination.

7 (previously presented): A conductive resin film as claimed in Claim 1 used as a collector for an electric double layer capacitor.

8 (original): A collector for an electric double layer capacitor comprising the conductive resin film as claimed in Claim 7.

9-23 (canceled)

24 (currently amended): The conductive resin film as claimed in Claim 1, wherein the thermoplastic resin is selected from the group consisting of polyoefin polyolefin resins, polyolefin elastormers, hydrogenated styrene elastomers, fluororesins and fluoro-elastomers.

The conductive resin film as claimed in Claim 24, wherein 25 (previously presented): the thermoplastic resin from fluororesins or fluoro-elastomers is selected from the group consisting of polyterafluoroethylene, tetrafluoroethylene-perfluoroalkyl vinyl ether copolymer, tetrafluoroethylene-hexafluoropropylene copolymer, tetrafluoroethylene-hexafluoropropylene perfluoroalkyl vinyl ether copolymer, tetrafluoroethylene-ethylene copolymer, polychlorotrifluoroethylene, chlorotrifluoroethylene-ethylene copolymer, polyvinylidene fluoride, polyvinyl fluoride, tetrafluoroethylene-hexafluoropropylene-vinylidene fluoride copolymer, vinylidene fluoride- hexafluoropropylene copolymer, vinyliden fluoride-propylene copolymer, fluorine-containing silicone rubbers, fluorine-containing vinyl ether rubbers, fluorine-containing phosphazene rubbers abd fluorine-containing thermoplastic elastomers; and/or

wherein the thermoplastic resin from polyolefin resins or polyolefin elastomers is selected from the group consisting of polyethylene, polypropylene, polybutene, poly(4-methyl-1-pentene), polyhexene, polyoctene, hydrogenated styrene-butaidiene rubbers, EPDM, EPM and EBM.

26 (previously presented): The conductive resin film as claimed in Claim 1, wherein the thermoplastic resin is selected from the group consisting polyvinylidene fluoride, tetrafluoroetyhylene-hexafluoropropylene-vinylidene fluoride copolymer, vinylidene fluoride-

Application No.: 10/519,339 Filing Date: August 15, 2005

hexafluoropropylene, copolymer, vinylidene fluoride-propylene copolymer, polyethylene, polypropylene, EPDM and hydrogenated styrene-butadiene rubbers.

27 (canceled):